



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,336	06/15/2005	Robert C Gasman	C75130	7355

20462 7590 10/16/2007
SMITHKLINE BEECHAM CORPORATION
CORPORATE INTELLECTUAL PROPERTY-US, UW2220
P. O. BOX 1539
KING OF PRUSSIA, PA 19406-0939

EXAMINER

PEPITONE, MICHAEL F

ART UNIT	PAPER NUMBER
----------	--------------

4134

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/16/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

US_cipkop@gsk.com

Office Action Summary

Application No.

10/539,336

Applicant(s)

GASMAN, ROBERT C

Examiner

Michael Pepitone

Art Unit

4709 4134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/15/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/15/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn *et al.* (US Patent 6,166,102), in view of Pinschmidt, Jr. *et al.* (US Patent 6,538,143).

Regarding claim 1: Ahn *et al.* teaches a denture adhesive composition comprising a denture adhesive effective amount of a denture adhesive salt which is a mixed partial salt of a copolymer of an alkyl vinyl ether and maleic acid/anhydride which was partially reacted with an amino group, in a pharmacologically acceptable carrier {sodium carboxymethyl cellulose} wherein the cations are sodium, strontium, potassium, calcium, magnesium, zinc, and zirconium, and combinations thereof (1:1-7; 4:8-15; 5:1-6; 5:54-65; 6:19-23). Ahn *et al.* does not teach a mixed partial salt of an amino ethyl ethylene urea (AEEU) substituted alkyl vinyl ether/maleic acid copolymer. However, Pinschmidt, Jr. *et al.* teaches a wet adhesive composition, wherein cyclic ureas such as amino ethyl ethylene urea are used as a wet adhesion promoting moiety (3:14-45). Ahn *et al.* and Pinschmidt, Jr. *et al.* are combinable because they are concerned with a similar technical difficulty, namely the preparation of adhesives. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined wet adhesion promoters based on cyclic ureas (AEEU), as taught by Pinschmidt, Jr. *et al.* in the invention of

Art Unit: 4134

Ahn *et al.*, and would have been motivated to do so since Pinschmidt, Jr. *et al.* suggests that such moieties promote wet adhesion (3:14-45), and is an equivalent alternative means of providing an adhesive for a wet environment.

Regarding claims 2-5: Ahn *et al.* teaches the basic claimed composition [as set forth above with respect to claim 1], wherein the cations of the mixed partial salt are a combination of: sodium, magnesium, and zinc [instant claim 2]; magnesium and zinc [instant claim 3]; zinc and calcium [instant claim 4]; calcium and sodium [instant claim 5] (5:1-6),

Regarding claim 6: Ahn *et al.* teaches the basic claimed composition [as set forth above with respect to claim 1], wherein the alkyl moiety is methyl {methyl vinyl ether} (4:41-45).

Regarding claim 7: Ahn *et al.* teaches the basic claimed composition [as set forth above with respect to claim 1], wherein the composition is a cream (7:65-67).

Regarding claim 8: Ahn *et al.* teaches the basic claimed composition [as set forth above with respect to claim 1], wherein the denture adhesive copolymer salt comprises 10-70% by weight of the adhesive composition (6:13-16).

Claims 9-10, and 13-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn *et al.* (US Patent 6,166,102), in view of Pinschmidt, Jr. *et al.* (US Patent 6,538,143), as applied to claim 1 above, and in further view of Wong *et al.* (US Patent 6,423,762).

Regarding claims 9-10: Ahn *et al.* teaches the basic claimed composition [as set forth above with respect to claim 1], but does not teach a denture adhesive composition in the form of a powder or a liner. However, Wong *et al.* teaches a denture adhesive composition based on mixed partial salts of a copolymer of an alkyl vinyl ether and maleic acid/anhydride

Art Unit: 4134

{MVE/MA}, wherein the composition is in the form of a powder [instant claim 9], a liner [instant claim 10] (6:54-61; 7:30-49). Ahn *et al.* and Wong *et al.* are combinable because they are concerned with a similar technical difficulty, namely the preparation denture adhesives. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined the denture adhesive in the form of a powder or liner, as taught by Wong *et al.* in the invention of Ahn *et al.*, and would have been motivated to do so since Wong *et al.* suggests the composition is in contact with saliva, the denture adhesive hydrate and develop a high degree of tack (6:54-61), and is an equivalent alternative means of providing a denture adhesive.

Regarding claims 13-14: Ahn *et al.* teaches the basic claimed composition [as set forth above with respect to claim 1], but does not teach a denture adhesive composition further comprising an acid activator. However, Wong *et al.* teaches a denture adhesive composition based on mixed partial salts of a copolymer of an alkyl vinyl ether and maleic acid/anhydride {MVE/MA}, wherein the composition further comprises an acid activator [instant claim 13], in an amount up to 3 weight% of the composition [instant claim 14] (3:15-21; 7:8-17). Ahn *et al.* and Wong *et al.* are combinable because they are concerned with a similar technical difficulty, namely the preparation denture adhesives. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined an acid activator, as taught by Wong *et al.* in the invention of Ahn *et al.*, and would have been motivated to do so since Wong *et al.* suggests the acid activator provides better hold, longer hold, and better organoleptic properties (3:5-12), and is an equivalent alternative means of providing a denture adhesive.

Claims 11-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn *et al.* (US Patent 6,166,102), in view of Pinschmidt, Jr. *et al.* (US Patent 6,538,143), as applied to claims 1 and 10 above, and in further view of Rajaiah *et al.* (US Patent 6,069,188).

Regarding claims 11-12: Ahn *et al.* teaches the basic claimed composition [as set forth above with respect to claim 1], but does not teach a denture adhesive composition in the form of a liner. However, Rajaiah *et al.* teaches a denture adhesive composition based on mixed partial salts of a copolymer of an alkyl vinyl ether and maleic acid/anhydride {MVE/MA}, wherein the liner is in the form of a hot-melt extruded liner [instant claim 11]; in the form of a non-adhesive self-supporting layer [instant claim 12] (2:10-24; 2:51-3:9). Ahn *et al.* and Rajaiah *et al.* are combinable because they are concerned with a similar technical difficulty, namely the preparation denture adhesives. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined the denture adhesive liner in the form of a hot-melt extruded liner or a non-adhesive self-supporting liner, as taught by Rajaiah *et al.* in the invention of Ahn *et al.*, and would have been motivated to do so since Rajaiah *et al.* suggests that such liners provide a composition which is easy to clean from dentures, since the liner maintains its strength and integrity in the presence of water and/or saliva, and allows the composition to be peeled from the dentures (2:43-48), and is an equivalent alternative means of providing a denture adhesive.

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn *et al.* (US Patent 6,166,102), in view of Pinschmidt, Jr. *et al.* (US Patent 6,538,143).

Art Unit: 4134

Regarding claims 15-16: Ahn *et al.* teaches a denture adhesive composition comprising a denture adhesive effective amount of a denture adhesive salt which is a mixed partial salt of a copolymer of an alkyl vinyl ether and maleic acid/anhydride which was partially reacted with an amino group, wherein the cations are sodium, strontium, potassium, calcium, magnesium, zinc, and zirconium and combinations thereof (1:1-7; 4:8-15; 5:1-6; 6:19-23). Ahn *et al.* does not teach a mixed partial salt of an amino ethyl ethylene urea (AEEU) substituted alkyl vinyl ether/maleic acid copolymer. However, Pinschmidt, Jr. *et al.* teaches a wet adhesive composition, wherein cyclic ureas such as amino ethyl ethylene urea are used as a wet adhesion promoting moiety (3:14-45). Ahn *et al.* and Pinschmidt, Jr. *et al.* are combinable because they are concerned with a similar technical difficulty, namely the preparation of adhesives. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined wet adhesion promoters based on cyclic ureas (AEEU), as taught by Pinschmidt, Jr. *et al.* in the invention of Ahn *et al.*, and would have been motivated to do so since Pinschmidt, Jr. *et al.* suggests that such moieties promote wet adhesion (3:14-45), and is an equivalent alternative means of providing an adhesive for a wet environment.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See attached form PTO-892.

Correspondence

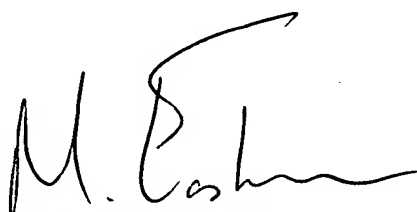
Art Unit: 4134

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pepitone whose telephone number is 571-270-3299. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MFP
03-October-2007


MARK EASHOO, PH.D.
SUPERVISORY PATENT EXAMINER
10/04/07